

IN THE CLAIMS:

Please cancel claim 41 and amend claims 38-39 as follows:

1-37. (Cancelled)

38. (Currently Amended) A ~~substrate for a liquid crystal display apparatus, the comprising:~~

at least one substrate having at least one pixel portion and a single electrode which forms at least one linear slit which extends generally across the pixel portion, said linear slit having at least one boundary between the ends of the linear slit; and

a layer of liquid crystal molecules facing said at least one substrate, individual ones of said liquid crystal molecules exhibiting rotation in a plane parallel to said at least one substrate and tilt in a direction perpendicular to said at least one substrate,

wherein shapes of said linear slit and said boundary control an amount of said rotation.

39. (Currently Amended) The ~~substrate apparatus~~ of claim 38, wherein said boundary comprises a narrow portion in said slit, relative to the width of non-boundary portions of said slit.

40-41. (Canceled)

42. (Previously Presented) A substrate for a liquid crystal display apparatus, comprising:

a linearly arranged protrusion or slit formed on the substrate, said protrusion or slit having a length, a width, and a height; and

a first boundary within said linearly arranged protrusion or slit, said first boundary having a width or height less than the width or height of said linearly arranged protrusion or slit adjacent said first boundary,

wherein shapes of each of said linearly arranged protrusion or slit and said first boundary control, in a plane parallel to the substrate, rotation of liquid crystal molecules near the protrusion or slit.

43. (Previously Presented) A substrate for a liquid crystal display apparatus, comprising:

a linearly arranged protrusion or slit formed on the substrate, said protrusion or slit having a length, a width, and a height;

a first boundary within said linearly arranged protrusion or slit, said first boundary having a width or height less than the width or height of said linearly arranged protrusion or slit adjacent said first boundary; and

a second boundary having a width or height different than the width or the height of either of said linearly arranged protrusion or slit and said first boundary.

44. (Previously Presented) A substrate for a liquid crystal display apparatus, comprising:

a linearly arranged protrusion or slit formed on the substrate, said protrusion or slit having a length, a width, and a height; and

a first boundary within said linearly arranged protrusion or slit, said first boundary having a width or height less than the width or height of said linearly arranged protrusion or slit adjacent said first boundary,

wherein said first boundary is formed by reducing a height of said protrusion or a depth of said slit.

45. (Previously Presented) The substrate of claim 42, wherein said first boundary is formed by increasing the width of said protrusion or slit.

46. (Previously Presented) A substrate for a liquid crystal display apparatus, comprising:

a linearly arranged protrusion or slit formed on the substrate, said protrusion or slit having a length, a width, and a height; and

a first boundary within said linearly arranged protrusion or slit, said first boundary having a width or height less than the width or height of said linearly arranged protrusion or slit adjacent said first boundary,

wherein said first boundary is formed by increasing a height of said protrusion or a depth of said slit.

47. (Previously Presented) The substrate of claim 42, wherein said first boundary is formed by reducing the width of said protrusion or slit.

48. (Previously Presented) The substrate of claim 42, wherein said first boundary is formed by an absence of an electrode under an area of said linearly arranged protrusion or slit where said first boundary is formed.

49. (Previously Presented) The substrate of claim 42, wherein said linearly arranged protrusion or slit is a linearly arranged dielectric protrusion formed on an electrode.

50. (Previously Presented) The substrate of claim 42, wherein said linearly arranged protrusion or slit is a linearly arranged slit formed by an absence of an electrode.

51. (Previously Presented) A liquid crystal display device comprising the substrate of claim 42.

52. (Previously Presented) A liquid crystal display apparatus, comprising:
at least one substrate; and

a single first electrode formed on said at least one substrate;
said electrode forming at least one linear slit in at least one pixel portion, said linear slit extending generally across the pixel portion, and having at least one boundary between opposing ends of said linear slit.

53. (Previously Presented) The liquid crystal display apparatus of claim 52, further comprising:

a second substrate;
liquid crystal having negative anisotropy or dielectric constant, and inserted between said at least one substrate and said second substrate;
a second electrode and on said second substrate; and
vertical alignment layers on said first and second electrodes.

54. (Cancelled)

55. (Previously Presented) A substrate for a liquid crystal display apparatus, the substrate having at least one electrode, said electrode forming at least one linear slit in at least one pixel portion, said linear slit extending generally across the pixel portion and having at least one boundary between the ends of the linear slit, electrode portions forming said linear slit being wider than the linear slit.